# Commonwealth of Kentucky Division for Air Quality

## PERMIT APPLICATION SUMMARY FORM

Completed by: Vahid Bakhtiar

GENERAL INFORMATION:		
Name:	Sensus Precision Die Casting	
Address:	232 Hopkinsville Road	
	Russellville, KY 42276	
Date application received:	3/13/2000	
SIC Code/SIC description:	3363, Aluminum Die Casting	
Source ID:	21-141-00022	
Source A.I. #:	2755	
Activity ID:	APE20060002	
Permit:	F-07-034	
APPLICATION TYPE/PERMIT ACTIVITY:		
[X] Initial issuance	[ ] General permit	
[ ] Permit modification	[X] Conditional major	
Administrative	Title V	
Minor	Synthetic minor	
Significant	[X] Operating	
Permit renewal	[ ] Construction/operating	
COMPLIANCE SUMMARY:  [ ] Source is out of compliance [X] Compliance certification signed	[ ] Compliance schedule included	
APPLICABLE REQUIREMENTS LIST:		
[] NSR [] NS	PS [X] SIP	
	SHAPS [ ] Other	
	t major modification per 401 KAR 51:001, 1(116)(b)	
MISCELLANEOUS:		
[ ] Acid rain source		
[ ] Source subject to 112(r)		
[X] Source applied for federally enfo	<u> </u>	
[ ] Source provided terms for alterna		
[ ] Source subject to a MACT stands		
[ ] Source requested case-by-case 11		
[ ] Application proposes new control technology		
[X] Certified by responsible official		
[X] Diagrams or drawings included		
[ ] Confidential business information	n (CBI) submitted in application	
[ ] Pollution Prevention Measures		
[ ] Area is non-attainment (list pollu	tants):	

#### **EMISSIONS SUMMARY:**

Pollutant	Actual (tpy) <sup>1</sup>	Potential (tpy)
$PM/PM_{10}$	11	<90
$\mathrm{SO}_2$	0.02	0.12
NOx	5	19.50
CO	1	16.38
VOC	65	37.04
Single HAPs	1.7	<9
Source wide HAPs	2.12	<22.5

<sup>1.</sup> Actual emissions are from the Kentucky Division for Air Quality's 2006 Emissions Inventory report.

#### **SOURCE DESCRIPTION:**

Sensus Precision Die Casting (Sensus), formerly Invensys Precision Die Casting, is an aluminum die casting plant located in Russellville, Kentucky that manufactures aluminum components for a wide range of markets, including automotive, gas meter, small engine, and electronics industries. The die casting process begins with the melting and processing of clean charge in natural gas-fired melting furnaces. Other source operations primarily consist of aluminum die casting operations and metal cleaning and surface coating operations. The Standard Industrial Classification (SIC) Code for this aluminum die casting source is 3363. Emissions from this source include volatile organic compounds (VOCs), particulate matter (PM/PM10), and hazardous air pollutants (HAPs) from the surface coating and Alodine parts washing operations; PM/PM10 and HAPs from the furnace and dross operations; and carbon monoxide (CO), nitrogen oxide (NOx), VOCs, PM/PM-10, and sulfur dioxide (SO<sub>2</sub>) from the combustion units. All emissions from the combustion units are uncontrolled. The particulate matter emissions from surface coating operations are subject to 401 KAR 59:010. The Lindberg Barrel Furnace, EP 32, has been removed from service and dismantled. EP 35, the Kimball 4 wall Acme Fab washing machine has been removed from the plant.

## **EMISSIONS AND OPERATING CAPS DESCRIPTIONS:**

Logan County is designated as attainment for all criteria pollutants. To preclude the applicability of 401 KAR 52:020, *Title V Permits*, total annual source-wide emissions, including emissions of insignificant activities, shall not equal or exceed the following specific limitations on a consecutive twelve (12) month basis:

- (a) Emissions of PM/PM10: 90 tons per year;
- (b) Emissions of any single HAP: 9 tons per year; and
- (c) Emissions of combined HAPs: 22.5 tons per year.

Compliance with the above limits shall also make the requirements of 40 CFR Part 63 for major sources of HAP emissions, as incorporated by reference at 401 KAR 63:002, not applicable to this source.

Although the permit is conditioned to allow emissions of PM/PM10 in excess of 100 tons per year, pursuant to 401 KAR 59:010 and 401 KAR 61:010, the permittee voluntarily requested the federally enforceable PM/PM10 emissions limitation of less than 100 tons per year specified above. Accordingly, this approval is being issued as a conditional major operating permit, pursuant to 401 KAR 52:030.

### **OPERATIONAL FLEXIBILITY:**

There were no alternative operating scenarios proposed by the permittee.